# STATE OF IDAHO Department of Fish and Game

Joseph C. Greenley, Director

# Quarterly Project Progress Report CLEARWATER RIVER DEVELOPMENT OF SPRING CHINOOK STOCKS

Project No. 88E25030 Contract No. 03-6-208-00029

Period Covered: October 1, to December 31, 1975

Columbia River Fisheries Development Program
February, 1976

## Clearwater River Development of Spring Chinook Stocks

#### ABSTRACT:

Indian Creek incubation channel received its last plant of eyed chinook eggs in October bringing the total to 2,406,731. The Cowlitz State Salmon Hatchery in Washington supplied 1,687,000 eyed chinook eggs which were planted in the Crooked River incubation channels, and an additional 1,400,000 eyed eggs which were placed in the Red River channel. The Clearwater River system received a total of 5,493,731 eyed chinook eggs. Severe sanding caused an estimated 700,000 alevin mortality at Crooked River during early December flooding, while the other channels were not noticeably affected.

### **REPORT OF PROGRESS:**

The Washington Department of Fisheries was contacted for the availability of excess spring chinook eggs within their system. With their cooperation we were able to obtain about 3,087,000 eyed eggs from the State Salmon Hatchery on the Cowlitz River. We placed 1,687,000 of these eggs in the Crooked River incubation channel and 1,400,000 of the eyed eggs in the Red River incubation channel. All the eggs were transported by vehicle. Two separate trips were taken to the Cowlitz Hatchery with two vehicles each trip. The eggs were carried in our standard egg baskets with ice placed over the top for cooling. Since most of the traveling was done at night, there was little evaporation and the eggs arrived at the channels in good condition.

The final 361,597 eyed chinook eggs from Sweetwater Eyeing Station, and 280,659 eyed chinook eggs from Rapid River Hatchery were planted in Indian Creek incubation channel on October 2, raising the total plant there to 2,406,731 eyed eggs. A summary of all egg plants is contained in Table 1.

Table 1. Eyed Chinook Egg Plants in the Clearwater River System, 1975

Channel	Date	Number	Hatchery
Indian Creek	September 24	886,112	Sweetwater
Indian Creek	September 29	878,363	Sweetwater
Indian Creek	October 2	361,597	Sweetwater
Indian Creek	October 2	<u>276,000</u>	Rapid River
	Sub-total	2,406,731	
Crooked River	October 6	1,687,000	Cowlitz
Red River	October 8	<u>1,500,000</u>	Cowlitz
	Total	<u>5,493,731</u>	

The eggs obtained from the Cowlitz Hatchery had hatched by the end of October while the eggs from Sweetwater and Rapid River did not begin to match until the middle of November.

Channel tenders were hired for all three channels to maintain flows throughout the winter. The tenders at Crooked River and Red River started their duties on November 1, while the tender at Indian Creek did not start until December 1. The Indian Creek tender will receive a flat \$200 for services through approximately the end of May, while the other two tenders received \$50 per month through June.

Periodic checks were made on all the channels to see if instructions were followed and all tenders appeared to be doing an adequate job. Crooked River channel did however, received severe mortalities during one period of extreme freezing and thawing during early December. Flow ice plugged the channel. When the tender inspected the channel the next morning, he found the sand and siltation from the slower moving diversion channel had been picked up by the greater flows and carried over the ice layer that had formed on the sand trap and was deposited on the channel gravel. After he released the ice jam, he discovered that approximately half the channel had been sanded with a resulting loss of an estimated 700,000 alevins. The other two channels are in very good condition.

Poultry netting was placed over the gravel to reduce raccoon depredation at Indian Creek and by observation appears to be doing a good job.

Sweetwater Eyeing Station was cleaned and winterized. All pipes were drained and anti-freeze placed in the toilet bowl and goose neck of the sink.

Submitted by:

Steven A. Hoss Regional Fishery Biologist